

Amendment Under 37 C.F.R. § 1.111
Serial No.: 10/712,354
SUGHRUE MION, PLLC Ref: Q78495

REMARKS

Claims 1-65 are all the claims pending in the application.

As corrected by the Examiner, claims 1-65 are pending in the application. By way of this Amendment, Applicant has amended claims 5 and 25 to address the matter raised by the Examiner in paragraphs 4-6 of the Office Action. Accordingly, it is respectfully requested that the § 112 (second paragraph) rejection be withdrawn.

The Examiner has rejected claims 1-65 under § 103(a) as being unpatentable over an article authored by Scherbatyuk (entitled “The AUV Positioning Using Ranges from One Transponder LBL”). More specifically, the Examiner seems to acknowledge that Scherbatyuk does not disclose a method in which a vessel receives acoustic signals from a reference station having a known absolute position and calculates its range from the reference station wherein the acoustic signals are received from the same reference station in several arbitrary positions of the vessel. On the other hand, the Examiner seems to contend that “since the AUV is (sic – not) moving and the ranges are obtained and different from each other, it is obvious to one (sic - of) ordinary skill in the art that each range is obtained at different location, which means at the ‘arbitrary position’. Thus, it is obvious that the ranges of Scherbatyuk are obtained from the various arbitrary positions and are used to calculate the position of the AUV and combined with the dead reckoning data.”

Applicants respectfully submit that the Examiner has failed to establish a *prime facie* case of obviousness. First, Applicant notes that the Scherbatyuk article is discussed in the background portion of the application at page 3, lines 11-33. As noted therein, the method

disclosed in this publication has limitations that requires that the vehicle be at a substantially constant depth. The claimed invention overcomes this deficiency of Scherbatyuk.

The problem with the Examiner's rejection is on the one hand the Examiner acknowledges that Scherbatyuk does not teach each and every element recited in claim 1, but on the other hand contends that it would have been obvious to one of ordinary skill in the art that, in fact, Scherbatyuk actually includes the missing feature(s).

Accordingly, it is respectfully submitted that the Examiner's obviousness rejection simply cannot stand: either the Scherbatyuk discloses each and every feature recited in the claim (and hence supports a rejection under § 102) or the prior art does not teach every limitation of the claim. In the latter, case, an Examiner must establish that the omitted feature was known to a person of ordinary skill in the art and provide an explanation as to why a person of ordinary skill in the art would have been motivated to modify the reference to include the omitted feature. Even a cursory review of the Examiner's rejection shows that the Examiner has failed to explain which piece of secondary art discloses the omitted feature of Scherbatyuk and why it would have been obvious to one of ordinary skill in the art to modify this Scherbatyuk method to include this feature.

Based on the foregoing, it is respectfully submitted that the rejection is improper on its face. Therefore, it is respectfully requested that the Examiner either issue a new rejection or allow the claims in the subject application.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Amendment Under 37 C.F.R. § 1.111
Serial No.: 10/712,354
SUGHRUE MION, PLLC Ref: Q78495

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

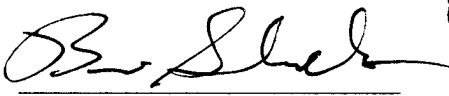
Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER


for Brian W. Hannon Reg. No. 50,245
Registration No. 32,778

Date: May 23, 2006